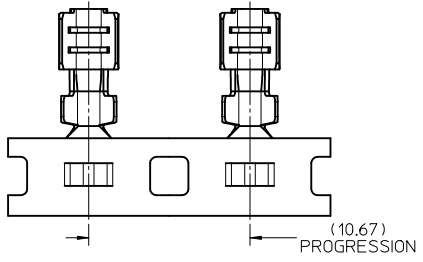
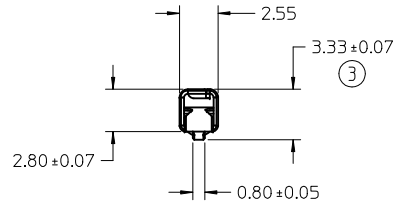


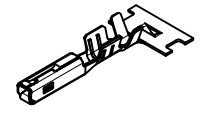
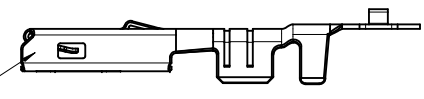
**DIMENSIONS FOR LARGE POLARIZATION RIB TERMINAL ONLY**

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. MATING TERMINAL SHOWN ON SD-33000-001
2. MATERIAL: ASTM B422, UNS C19025, HR04  
THICKNESS: 0.30 mm ±0.01  
TEMPER: FULL HARD (REF)  
TENSILE: 496 MIN MPA
3. TIN PLATED TERMINAL FINISH:  
OVERALL UNDERPLATE ELECTRODEPOSITED NICKEL  
OVERALL ELECTRODEPOSITED REFLOW TIN
4. GOLD PLATED TERMINAL FINISH  
OVERALL UNDERPLATE ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL  
CONTACT AREA - ELECTRODEPOSITED GOLD  
GRIP AREA - ELECTRODEPOSITED 100% TIN MATTE FINISH
5. SILVER PLATED TERMINAL FINISH  
OVERALL UNDERPLATE ELECTRODEPOSITED DUCTILE SULFAMATE NICKEL  
CONTACT AREA - ELECTRODEPOSITED PURE SILVER (0.5% MAX IMPURITIES) SEMI-BRIGHT FINISH  
- SILVER ANTI-TARNISH : EVABRITE  
GRIP AREA - ELECTRODEPOSITED 100% TIN MATTE FINISH
6. MEETS PERFORMANCE SPECIFICATION FOR CABLE TO TERMINAL ELECTRICAL CRIMPS PER SAE/USCAR-21 (8/2001)
7. MEETS PERFORMANCE STANDARD FOR AUTOMOTIVE ELECTRICAL CONNECTOR SYSTEMS FOR SAE/USCAR-2, REV. 4 (TEMP CLASS 3) (4/2001)
8. MEETS ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) REV:11 (5/2002)
9. MEETS FIELD CORRELATED LIFE TEST (FCLT) PER SAE/USCAR-20 (11/2001)
10. MEETS WIRING COMPONENT DESIGN GUIDELINES SAE/USCAR-12 REV 2 (12/2001)
11. TSC ON A DIMENSION TO BE INTERPRETED AS DISTANCE TO A THEORETICAL SHARP CORNER AS IF THE RADIUS WERE NOT PRESENT
12. REFERENCE 97BG-14474-AAB FOR LARGE POLARIZATION RIB CAVITY SPECIFICATION
13. INSERTION FORCE (TIN) AVG. FROM PV TESTING =  
3.8N LARGE POLARIZATION RIB  
3.5N SMALL POLARIZATION RIB  
(REFERENCE)
14. ALL DIMENSIONS EXCEPT  $\phi$  &  $\angle$  ARE COMMON TO BOTH SMALL AND LARGE POLARIZATION RIB TERMINALS
15. REFERENCE PK-31300-516 FOR REEL DIRECTION
16. REFERENCE AS-33012-002 FOR CRIMP INFORMATION

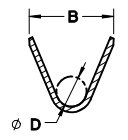
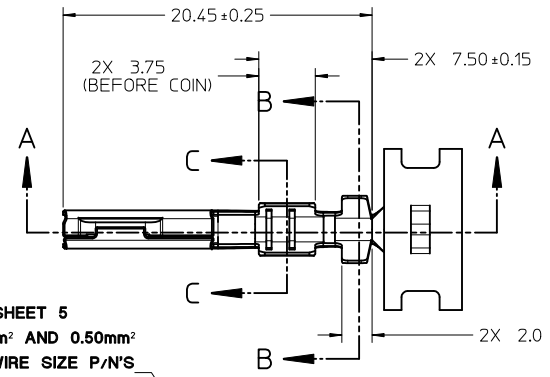


STAMP PLATING TYPE  
Sn-TIN, Au-GOLD OR  
Ag-SILVER IN THIS  
AREA

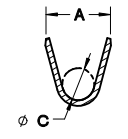
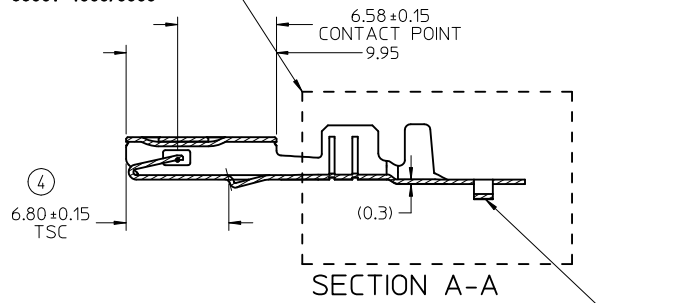


SCALE 2:1

SEE SHEET 5  
0.35mm<sup>2</sup> AND 0.50mm<sup>2</sup>  
ISO WIRE SIZE P/N'S  
33012-2004/3004  
33001-4005/5005



SECTION B-B  
SCALE 5:1

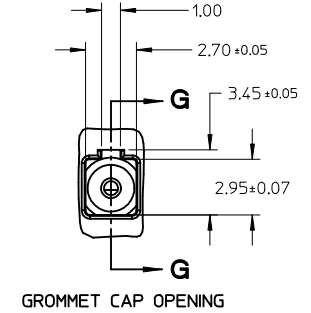
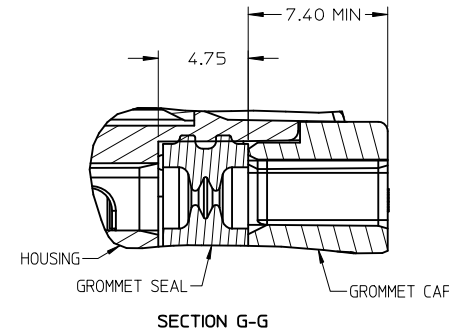


SECTION C-C  
SCALE 5:1

CARRIER BUMP DIRECTION  
POINTS DOWN FOR TIN PLATED TERMINALS  
POINTS UP FOR PRECIOUS PLATED TERMINALS

ENTER DESCRIPTION EC NO: UAU2011-0559 DRAWN:YREN05 2011/01/12 CHKD: APPR:BMOSER 2011/01/20	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		▽=0 ▽=0 ▽=0	mm INCH	DRAWN BY DATE L. PULLIAM 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL		
B2	REV		4 PLACES ± --- ± ---	CHECKED BY DATE A. DHIR 2005/06/21	MOLEX INCORPORATED	DOCUMENT NO. SD-33012-002	SHEET NO. 1 OF 5
			3 PLACES ± 0.005 ± ---	APPROVED BY DATE B. MOSER 2005/06/22			
			2 PLACES ± 0.10 ± ---	SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
			1 PLACE ± 0.3 ± ---				
			ANGULAR ± 3 °				
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				

TABLE										
SUPPLIER PART NUMBER	PLATING	GRIP CODE	WIRE APPLICATION		A +0.30	B +0.30	C +0.30	D +0.30	COMMENTS	
SMALL POLARIZATION RIB										
RIGHT PAYOFF DIRECTION B			SAE (AWG)	METRIC (mm <sup>2</sup> )						
LEFT PAYOFF DIRECTION D										
33012-2001	33012-3001	TIN	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33012-2002	33012-3002	TIN	18	18/20	10-0.75	3.3	3.1	1.3	1.4	
33012-2003	33012-3003	TIN	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33012-2004	33012-3004	TIN	M3	N/A	0.35-0.50	2.5	2.7	0.9	1.54±0.1	PREFERRED TERMINAL FOR USE IN SEALED APPLICATION WITH 0.35& 0.50 WIRES (OD 1.2-1.7mm)
33001-2003	33001-3003	GOLD	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33001-2004	33001-3004	GOLD	18	18/20	10-0.75	3.3	3.1	1.3	1.4	
33001-2005	33001-3005	GOLD	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33001-4001	33001-5001	SILVER	14	14/16	2.0-15	3.9	4.4	1.7	1.6	NOT TO BE USED IN CONNECTOR SYSTEMS WITH CIRCUIT COUNTS HIGHER THAN 8 DUE TO HIGHER CONNECTOR MATE/UNMATE FORCE
33001-4002	33001-5002	SILVER	18	18/20	10-0.75	3.3	3.1	1.3	1.4	
33001-4003	33001-5003	SILVER	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33001-4005	33001-5005	SILVER	M3	N/A	0.35-0.50	2.5	2.7	0.9	1.54±0.1	PREFERRED TERMINAL FOR USE IN SEALED APPLICATION WITH 0.35& 0.50 WIRES (OD 1.2-1.7mm) USE IN CLASS 3 (125° C) APPLICATIONS ONLY
LARGE POLARIZATION RIB - NOT TO BE USED IN MX150 SEALED CONNECTORS										
33012-2021	33012-3021	TIN	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33012-2022	33012-3022	TIN	18	18/20	10-0.75	3.3	3.1	1.3	1.4	
33012-2023	33012-3023	TIN	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33001-2021	33001-3021	GOLD	14	14/16	2.0-15	3.9	4.4	1.7	1.6	
33001-2022	33001-3022	GOLD	18	18/20	10-0.75	3.3	3.1	1.3	1.4	
33001-2023	33001-3023	GOLD	22	22	0.35-0.50	2.5	2.6	0.9	1.0	
33001-4021	33001-5021	SILVER	14	14/16	2.0-15	3.9	4.4	1.7	1.6	NOT TO BE USED IN CONNECTOR SYSTEMS WITH CIRCUIT COUNTS HIGHER THAN 8 DUE TO HIGHER CONNECTOR MATE/UNMATE FORCE
33001-4022	33001-5022	SILVER	18	18/20	10-0.75	3.3	3.1	1.3	1.4	
33001-4023	33001-5023	SILVER	22	22	0.35-0.50	2.5	2.6	0.9	1.0	



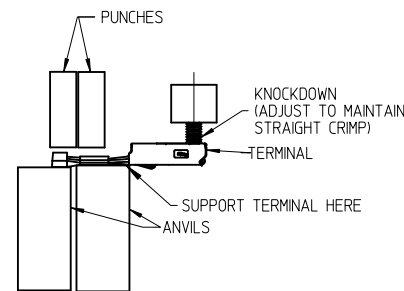
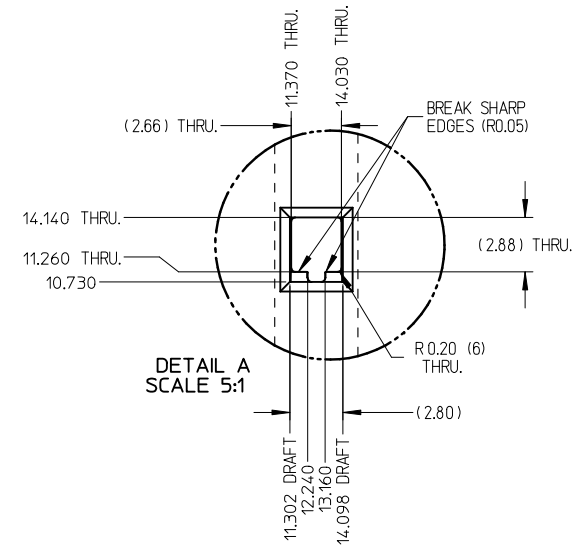
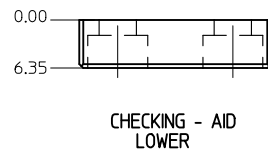
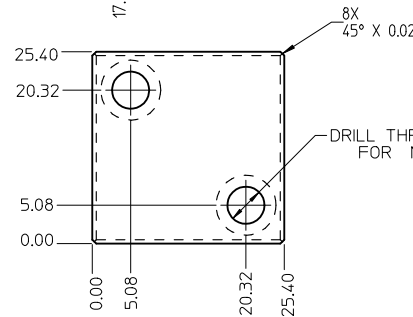
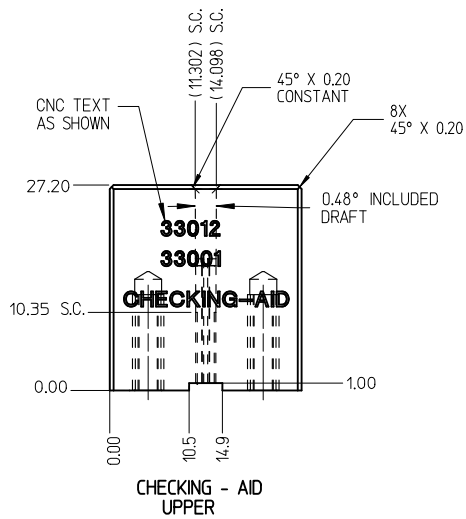
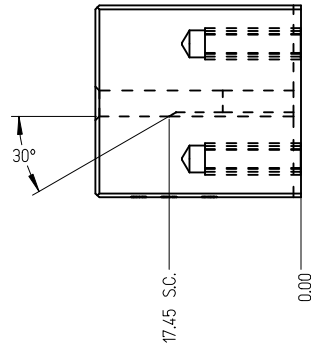
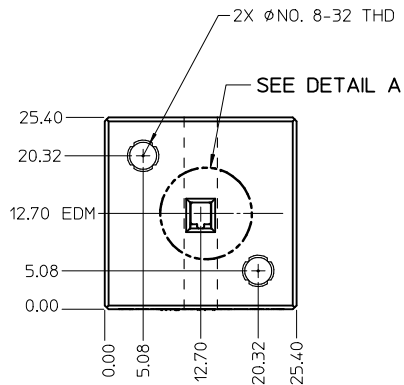
**GROMMET SEAL / CAP CONFIGURATION TO MODIFY  
LARGE POLARIZATION RIB CAVITY TO ACCEPT  
SMALL POLARIZATION RIB APPLICATIONS**

<b>ENTER DESCRIPTION</b> EC NO: UAU2011-0559 DRWN:REN05 2011/01/12 CHKD: APPR:BMOSER 2011/01/20 REV/ DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0	mm INCH	MM ONLY	METRIC			
	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE			
	▽=0	3 PLACES ± 0.005 ± ---	L. PULLIAM 2005/06/21	MX150 RECEPTACLE TERMINAL			
		2 PLACES ± 0.10 ± ---	CHECKED BY DATE				
		1 PLACE ± 0.3 ± ---	A. DHIR 2005/06/21				
		ANGULAR ± 3 °	APPROVED BY DATE				
			B. MOSER 2005/06/22				
			MATERIAL NO.	DOCUMENT NO.			
			SEE TABLE	MOLEX INCORPORATED			
			SIZE C	SD-33012-002			
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				SHEET NO. 2 OF 5

THIS CHECKING - AID IS FOR SMALL POLARIZATION RIB TERMINALS ONLY



CHECKING - AID ASSEMBLY  
SCALE 1:1

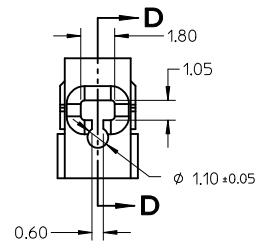
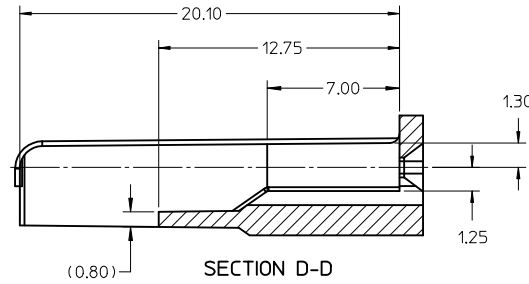
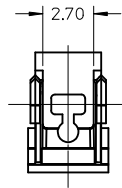


CRIMP REQUIREMENTS:

1. CRIMP STRAIGHTNESS MUST BE MAINTAINED USE A KNOCKDOWN TOOL LOCATED AS SHOWN TERMINAL BOX MUST NOT BE DEFORMED
2. AFTER CRIMPING, THE CRIMPED TERMINAL (AND UP TO 5 mm OF WIRE PAST THE INSULATOR CUTOFF TAB) MUST FIT FREELY INTO THE CHECKING-AID SHOWN ON THIS PAGE
3. FOR OTHER MECHANICAL REQUIREMENTS ON CRIMPED TERMINALS, REFER TO SAE/USCAR-21 (5-13-02) SECTIONS 4.2 (VISUAL INSPECTION), 4.2 (CROSS SECTION ANALYSIS) AND 4.4 (CONDUCTOR CRIMP PULLOUT FORCE)

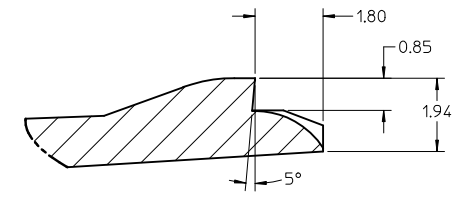
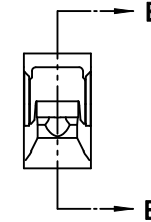
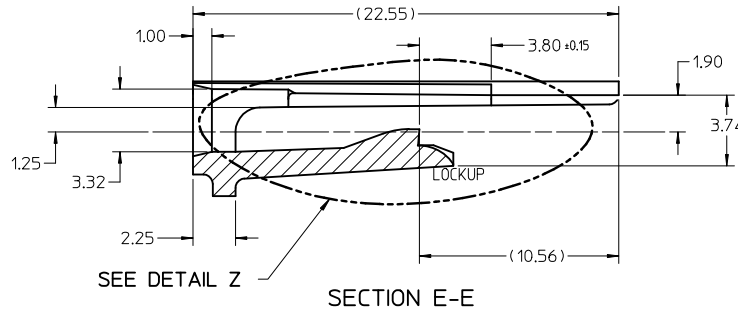
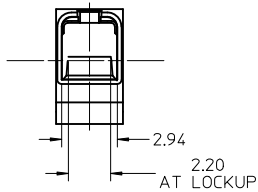
UPPER & LOWER  
CHECKING-AID  
A2 TOOL STEEL  
HARDEN & GRIND  
ROCKWELL "C" 56-58

<b>ENTER DESCRIPTION</b> EC NO: UAU2011-0559 DRWN:YREN05 2011/01/12 CHKD: APPR:BMOSER 2011/01/20 REV:	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>2:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE L. PULLIAM 2005/06/21	TITLE <b>MX150 RECEPTACLE TERMINAL</b>		
	▽=0	3 PLACES ± 0.005 ± ---	CHECKED BY DATE A. DHIR 2005/06/21	MOLEX INCORPORATED		
	▽=0	2 PLACES ± 0.10 ± ---	APPROVED BY DATE B. MOSER 2005/06/22	DOCUMENT NO. <b>SD-33012-002</b>		
		1 PLACE ± 0.3 ± ---	MATERIAL NO.	SHEET NO. 3 OF 5		
		ANGULAR ± 3 °	SEE TABLE			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

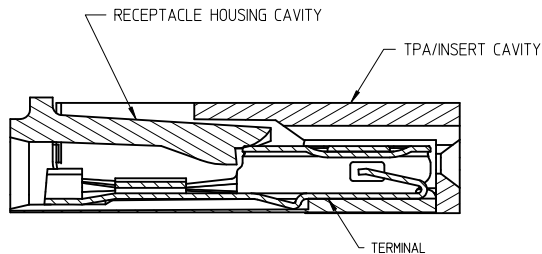


NOTES: UNLESS OTHERWISE SPECIFIED

1. TOLERANCES: LINEAR  $\pm 0.10$   
ANGULAR  $\pm 3^\circ$
2. ALL DRAFT WITHIN TOLERANCE.
3. MAX RADII ON ALL CORNERS SHOWN SHARP: 0.10
4. MAX FLASH PERMISSIBLE: 0.1
5. EJECTOR PIN MARKS PERMISSIBLE IF FLUSH TO 0.25 BELOW SURFACE.
6. MATERIAL: HOUSING/FINGER SPECIFICATION ENGINEERED FOR MATERIAL WITH THE FOLLOWING PROPERTIES:  
A. FLEXURAL MODULUS = 4,500 TO 9,400 MPa  
PER ASTM TEST D790  
B. ELONGATION AT YIELD = 2.3% OR BETTER  
PER ASTM TEST D638 TYPE V
7. CAVITY SPEC FOR USE ONLY WITH MOLEX RECEPTACLE  
TERMINAL PART NUMBERS SPECIFIED ELSEWHERE ON THIS  
DRAWING

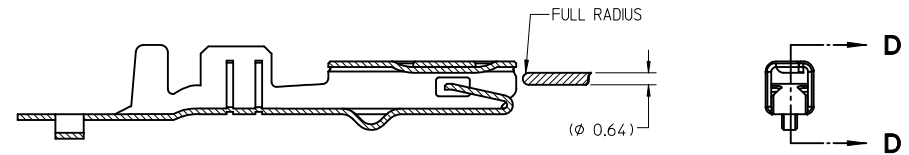
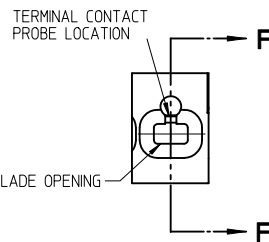


DETAIL Z  
SCALE 20:1



SECTION F-F

RECEPTACLE CAVITY ASSEMBLED VIEWS  
FOR SMALL POLARIZATION RIB APPLICATIONS  
FIG. 1



SECTION D-D  
FOR LARGE POLARIZATION RIB APPLICATIONS  
FIG. 2

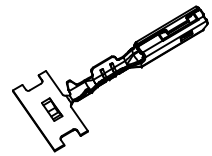
PROBING DOWN THE  
THROAT MUST USE  
THIS TERMINAL PROBE

PROBE PIN DETAILS:  
MANUFACTURER: LONE STAR INDUSTRIAL  
PART NUMBER: LS054R-403-N-4.6  
PIN DIAMETER: 0.025 IN (0.64mm)  
TIP SHAPE: SPHERICAL  
TEL: 915-779-7255

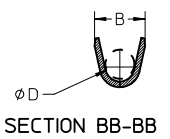
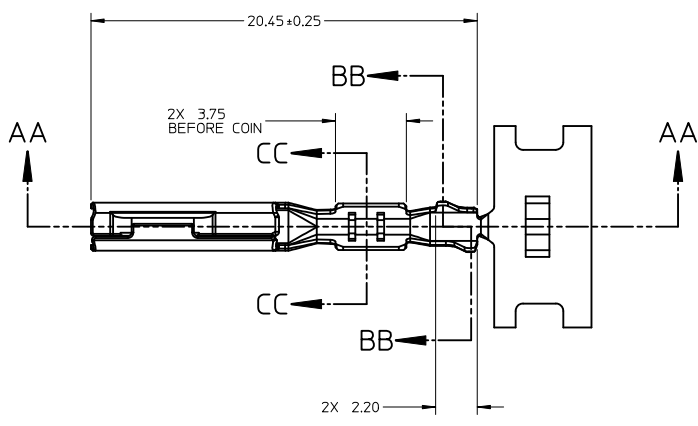
PREFERRED PROBING LOCATION  
IS NOT ON SPRING MEMBER

IF ELECTRICAL CONTINUITY PROBE  
TOUCHES SPRING MEMBER USE  
PROBING AS SHOWN IN FIG. 2

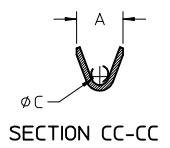
ENTER DESCRIPTION EC NO: UAU2011-0559 DRAWN: REN05 CHKD: APPR: BMOSER	2011/01/12 2011/01/20	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
				4 PLACES ± --- ± ---	3 PLACES ± 0.005 ± ---	DRAWN BY L. PULLIAM	DATE 2005/06/21	TITLE MX150 RECEPTACLE TERMINAL		
B2				2 PLACES ± 0.10 ± ---	1 PLACE ± 0.3 ± ---	APPROVED BY B. MOSER	DATE 2005/06/22	MOLEX INCORPORATED		SHEET NO. 4 OF 5
				ANGULAR ± 3°		SEE TABLE		DOCUMENT NO. SD-33012-002		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



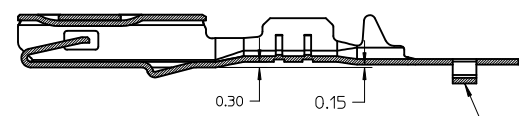
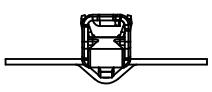
ISO VIEW  
SCALE 2:1



SECTION BB-BB



SECTION CC-CC



SECTION AA-AA

P/N'S 33012-2004/3004  
33001-4005/6005

CARRIER BUMP DIRECTION  
POINTS DOWN FOR TIN PLATED TERMINAL  
POINTS UP FOR PRECIOUS METAL PLATED  
TERMINAL

ENTER DESCRIPTION EC NO: UAU2011-0559 DRWN:REN05 CHKD: APPR:BMOSER 2011/01/12 2011/01/20	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM ONLY	5:1	METRIC	
	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE <b>MX150 RECEPTACLE TERMINAL</b>		
	▽=0	3 PLACES ± 0.005 ± ---	L. PULLIAM 2005/06/21			
▽=0	2 PLACES ± 0.10 ± ---	CHECKED BY DATE	MOLEX INCORPORATED			
	1 PLACE ± 0.3 ± ---	A. DHIR 2005/06/21				
B2	ANGULAR ± 3°	APPROVED BY DATE	SEE TABLE SD-33012-002			
REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	B. MOSER 2005/06/22				
		MATERIAL NO.	DOCUMENT NO.			SHEET NO.
		SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			5 OF 5